



Davco 2 Part Rapid Liquid

Parex Group (ParexGroup)

Chemwatch: 23-9909

Version No: 5.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 1

Issue Date: 13/03/2019

Print Date: 03/05/2019

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SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Davco 2 Part Rapid Liquid
Synonyms	Not Available
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.
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Details of the supplier of the safety data sheet

Registered company name	Parex Group (ParexGroup)
Address	67 Elizabeth Street Welherill Park NSW 2164 Australia
Telephone	+61 2 9616 3000
Fax	+61 2 9725 5551
Website	www.davco.com.au
Email	marketing@davco.com.au

Emergency telephone number

Association / Organisation	Not Available	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	Not Available	+61 1800 951 288
Other emergency telephone numbers	Not Available	+61 2 9186 1132

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL, NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	0	
Toxicity	0	1 (Acute Oral)
Body Contact	1	2 (Skin Irritant)
Reactivity	0	1 (Explosive)
Chronic	0	1 (Chronic Toxicity)

Poisons Schedule	Not Applicable
Classification	Not Applicable

Label elements

Hazard pictogram(s)	Not Applicable
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SIGNAL WORD	NOT APPLICABLE
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Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Continued...

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Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	<0.02	isothiazolinones
124-68-5	<2	<u>monosobutanolamine</u>
Not Available	balance	other ingredients determined not to be hazardous

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none">Wash out immediately with fresh running water.Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.Seek medical attention without delay, if pain persists or recurs seek medical attention.Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin or hair contact occurs.</p> <ul style="list-style-type: none">Flush skin and hair with running water (and soap if available).Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none">If fumes, aerosols or combustion products are inhaled remove from contaminated area.Other measures are usually unnecessary.
Ingestion	<ul style="list-style-type: none">Immediately give a glass of water.First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

- foam,
- dry chemical powder,
- carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Advice for firefighters

Fire Fighting	<ul style="list-style-type: none">Alert Fire Brigade and tell them location and nature of hazard.Wear breathing apparatus plus protective gloves in the event of a fire.Prevent, by any means available, spillage from entering drains or water courses.Use fire fighting procedures suitable for surrounding area.DO NOT approach containers suspected to be hot.Cool fire exposed containers with water spray from a protected location. <p>The material is not readily combustible under normal conditions.</p> <ul style="list-style-type: none">However, it will break down under fire conditions and the organic component may burn.Not considered to be a significant fire risk.Heat may cause expansion or decomposition with violent rupture of containers.Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).May emit acid smoke.
Fire/Explosion Hazard	<p>Decomposes on heating and produces toxic fumes of carbon dioxide (CO₂) other pyrolysis products typical of burning organic material. May emit poisonous fumes.</p>
HAZCHEM	Not Applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

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See section 12

Methods and material for containment and cleaning up

- Minor Spills**
 - ▶ Clean up all spills immediately.
 - ▶ Avoid breathing vapours and contact with skin and eyes.
 - ▶ Control personal contact with the substance, by using protective equipment.
 - ▶ Contain and absorb spill with sand, earth, inert material or vermiculite.
 - ▶ Wipe up.
 - ▶ Place in a suitable, labelled container for waste disposal.
- Major Spills**
 - ▶ Moderate hazard.
 - ▶ Clear area of personnel and move upwind.
 - ▶ Alert Fire Brigade and tell them location and nature of hazard.
 - ▶ Wear breathing apparatus plus protective gloves.
 - ▶ Prevent, by any means available, spillage from entering drains or water course.
 - ▶ Stop leak if safe to do so.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

- Safe handling**
 - ▶ Avoid all personal contact, including inhalation.
 - ▶ Wear protective clothing when risk of exposure occurs.
 - ▶ Use in a well-ventilated area.
 - ▶ Prevent concentration in hollows and sumps.
 - ▶ DO NOT enter confined spaces until atmosphere has been checked.
 - ▶ DO NOT allow material to contact humans, exposed food or food utensils.
- Other information**
 - ▶ Store in original containers.
 - ▶ Keep containers securely sealed.
 - ▶ Store in a cool, dry, well-ventilated area.
 - ▶ Store away from incompatible materials and foodstuff containers.
 - ▶ Protect containers against physical damage and check regularly for leaks.
 - ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

- Suitable container**
 - ▶ Polyethylene or polypropylene container.
 - ▶ Packing as recommended by manufacturer.
 - ▶ Check all containers are clearly labelled and free from leaks.
- Storage incompatibility** None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
monoisobutanolamine	Isobutanol-2-amine	17 mg/m3	190 mg/m3	570 mg/m3
Ingredient	Original IDLH	Revised IDLH		
monoisobutanolamine	Not Available	Not Available		

Exposure controls

- Appropriate engineering controls**

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:
 Process controls which involve changing the way a job activity or process is done to reduce the risk.
 Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.
- Personal protection**

 - ▶ Safety glasses with side shields.
 - ▶ Chemical goggles.
- Eye and face protection**
 - ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.
- Skin protection** See Hand protection below

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Hands/feet protection	<p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly.</p> <ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	<p>See Other protection below</p> <ul style="list-style-type: none"> ▶ Overalls. ▶ P.V.C. apron.
Other protection	<ul style="list-style-type: none"> ▶ Barrier cream. ▶ Skin cleansing cream. ▶ Eye wash unit.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "Forsberg Clothing Performance Index".
The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:
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Material	CPI	Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
BUTYL	C				
NATURAL RUBBER	C	up to 10	1000	AK-AUS / Class1 P2	-
NEOPRENE	C				
PVA	C	up to 50	1000	-	AK-AUS / Class 1 P2
VITON	C	up to 50	5000	Airline *	-
		up to 100	5000	-	AK-2 P2
		up to 100	10000	-	AK-3 P2
		100+			Airline**

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory, may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

* - Continuous Flow ** - Continuous-flow or positive pressure demand
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Milky liquid with a characteristic odour; miscible with water.		
Physical state	Liquid	Relative density (Water = 1)	>1
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100 approx	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	VOC = 52 g/l (SCAQMD Method 304-91)
Vapour pressure (kPa)	Not Available	Gas group	Not Available

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Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> ▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material.
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.
Chronic	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Prolonged or chronic exposure to alkanolamines may result in liver, kidney or nervous system injury. Repeated inhalation may aggravate asthma and lung disease involving inflammation or scarring. Results of animal testing with diethanolamine (DEA) and monoethanolamine (MEA) has shown a wide range of possible effects, including induction of tumours, developmental abnormalities and injury to the foetus and mother. Many amines greatly sensitise the skin and respiratory system, and certain individuals, especially those predisposed to asthma and other allergic responses, may show allergic reactions when chronically exposed to alkanolamines.

Davco 2 Part Rapid Liquid	TOXICITY Not Available	IRRITATION Not Available
monoisobutanolamine	TOXICITY Dermal (rabbit) LD50 >2000 mg/kg ^[2] Oral (rat) LD50: 2900 mg/kg ^[2]	IRRITATION Not Available

Legend: 1: Value obtained from European ECHA Registered Substances - Acute toxicity 2: Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances.

Davco 2 Part Rapid Liquid	No significant acute toxicological data identified in literature search.
MONOISOBUTANOLAMINE	TRIS AMINO and its surrogate chemicals have very little, if any, toxicity. They are mildly irritating to eyes at moderate concentrations, and do not cause allergic skin reactions. Ingestion of relatively high dosages can cause liver changes. Patients with decreased liver function should not be given these substances over extended treatment periods. They have been known to have a harmful effect on the foetus if taken during pregnancy.

Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✗	Reproductivity	✗
Serious Eye Damage/Irritation	✗	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ - Data either not available or does not fill the criteria for classification
✔ - Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Davco 2 Part Rapid Liquid	Not Available	Not Available	Not Available	Not Available	Not Available
monoisobutanolamine	LC50	96	Fish	=100mg/L	1

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EC50	48	Crustacea	=193mg/L	1
EC50	96	Algae or other aquatic plants	52.872mg/L	3
NOEC	48	Crustacea	100mg/L	2

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3 12 (OSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA EcoTox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
monoisobutanolamine	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
monoisobutanolamine	LOW (BCF = 330)

Mobility in soil

Ingredient	Mobility
monoisobutanolamine	MEDIUM (KOC = 2.196)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- ▶ Reduction
- ▶ Reuse
- ▶ Recycling
- ▶ Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type.

Product / Packaging disposal

- ▶ DO NOT allow wash water from cleaning of process equipment to enter drains
- ▶ It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- ▶ Recycle wherever possible.
- ▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- ▶ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).
- ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
	Not Applicable
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

MONOISOBUTANOLAMINE(124-68-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Inventory of Chemical Substances (AICS)
GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 17: Summary of minimum requirements
IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk

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National Inventory Status

National Inventory	Status
Australia - AICS	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Canada - DSL	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Canada - NDSL	No (monoisobutanolamine; isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
China - IECS	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Europe - EINEC / ELINCS / NLP	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Japan - ENCS	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Korea - KECI	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
New Zealand - NZIoC	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Philippines - PICCS	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
USA - TSCA	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Taiwan - TCSI	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Mexico - INSC	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Vietnam - NCI	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Russia - ARIPS	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients
Thailand - TECI	No (isothiazolinones; other ingredients determined not to be hazardous) Non-disclosed ingredients

Legend:
Yes = All declared ingredients are on the inventory
No = Not determined or one or more ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	13/03/2019
Initial Date	01/11/2009

SDS Version Summary

Version	Issue Date	Sections Updated
3.1.1.1	13/11/2013	Acute Health (skin)
5.1.1.1	13/03/2019	Expiration, Review and Update

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

- PC – TWA: Permissible Concentration-Time Weighted Average
- PC – STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit,
- IDLH: Immediately Dangerous to Life or Health Concentrations
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index

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 TEL (+61 3) 9572 4700.